

What is claimed is:

1. A measurement processing apparatus for measuring a geometric feature of an object image, comprising:

5 a measurement-reference-element setting unit which automatically sets at least one first measurement reference element for use in measurement of said geometric feature of said object image, at at least one first position on said object image based on first image data representing the object image and position information indicating at least one second position of at least one second measurement reference element which is set on a measurement reference image corresponding to the object image; and

10 a geometric-feature measurement unit which measures said geometric feature of said object image based on said at least one first position of said at least one first measurement reference element.

15 2. A measurement processing apparatus according to claim 1, wherein said measurement-reference-element setting unit sets in advance a region of interest at a third position on said object image corresponding to each of said at least one second position, and automatically sets one of said at least one first measurement reference element in said region of interest.

20 25 3. A measurement processing apparatus according to claim 1, wherein said measurement-reference-element

setting unit aligns in advance said object image with said measurement reference image before the measurement-reference-element setting unit automatically sets said at least one first measurement reference element.

5 4. A measurement processing apparatus according to claim 1, further comprising a storage unit which stores said position information and second image data representing said measurement reference image in a predetermined storage medium so that the position
10 information is linked with the second image data, wherein said measurement-reference-element setting unit reads out said position information and the second image data from said predetermined storage medium, and automatically sets
15 said at least one first measurement reference element based on said second image data as well as said first image data and said position information.

 5. A measurement processing apparatus according to claim 1, wherein said measurement-reference-element
20 setting unit obtains a first portion of said object image corresponding to a second portion of said measurement reference image located in a vicinity of each of said at least one second measurement reference element by using
25 pattern matching processing, and automatically sets each of said at least one first measurement reference element at a position on said first portion of the object image corresponding to one of said at least one second

measurement reference element.

6. A measurement processing apparatus according to claim 1, wherein said measurement-reference-element setting unit searches for an edge in a vicinity of a third position on the object image corresponding to each of said at least one second measurement reference element, and automatically sets each of said at least one first measurement reference element based on information on the edge.

7. A measurement processing apparatus according to claim 1, wherein said measurement reference image is an image on which said geometric feature has been previously measured.

8. A measurement processing apparatus according to claim 1, wherein each of said object image and said measurement reference image is a chest image, and said geometric feature is a cardio-thoracic ratio.